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TESTIMONY

The Role of Incentive Pays in Military Compensation

JAMES HOSEK

CT-345

April 2010

Testimony presented before the Senate Armed Services Committee, Subcommittee on Personnel on April 28, 2010

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The Role of Incentive Pays in Military Compensation[2]

Before the Armed Services Committee
Subcommittee on Personnel
United States Senate

April 28, 2010

I would like to thank the Committee for the opportunity to testify. I will address my comments to the utility of incentive pays in influencing career decisions of members of the U.S. military.

The armed forces share a common foundation of military pay. The foundation includes basic pay, basic allowance for subsistence, basic allowance for housing (or housing in-kind), and a military health benefit for service members and their families. Educational benefits could also be included, as could contributions toward retirement benefits. This foundation of pay performs several functions. It helps to ensure that the services can recruit, retain, and motivate the number and caliber of people they need to meet manpower requirements, produce a flow of capable future leaders within the enlisted and officer ranks, and shape the force so that its experience and grade mix are appropriate to the desired force structure.

The health of the volunteer force depends on maintaining an adequate foundation of pay. This seems like an obvious statement, but at times the nation has inadvertently tested its validity. The combination of basic pay, basic allowance for subsistence, and basic allowance for housing were set high enough at the start of the volunteer force in 1973 to enable a successful launch. Yet lower than adequate pay increases in the following years led to a recruiting and retention crisis at the end of the 70s, and Congress faced the alternatives of returning to a draft or restoring military pay to competitive levels. Congress chose to restore pay, increasing it a total of 26 percent in fiscal 1980 and 1981. A second test occurred as the economy boomed in the late 1990s. Again military pay did not keep up with pay in the private sector and strains developed in recruiting and retention, though not as severe as in the late 1970s. Congress responded in the National Defense Authorization Act (NDAA) of 2000 with a 4.8 percent increase in basic pay, a restructuring of the pay table with higher increases for certain years of service and ranks, and a

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commitment to increase basic pay half a percentage point more than the Employment Cost Index in each fiscal year through 2006. The importance of this pay action was not that it had to be taken—ultimately, the volunteer concept cannot survive unless pay is kept at levels competitive with the private sector—but that the nation had restored pay and stabilized recruiting and retention before the terrorist attack on September 11, 2001 and the ensuing military operations in Iraq and Afghanistan.

An adequate foundation of military pay is necessary for the viability of the volunteer force, but it is not cost effective to pay service members only though foundational pays. Because market wages differ by skill, education, aptitude, and work conditions, it would be extremely costly to increase the foundational pays so they were competitive for the highest wage individuals. Doing so would mean that military pay was higher than needed for everyone else. This point is true in general but its relevance to policy action depends on the state of the economy. In 1999 when unemployment was low and jobs were plentiful, recruiting and retention were hampered by low military pay and the increases enacted in NDAA 2000 were appropriate. Today the economy is climbing out of a deep recession, unemployment is high, and job opportunities are expected to improve only gradually during the coming year. These conditions have helped recruiting and retention and weaken the case for a higher than usual increase in basic pay.

Incentive pays help the military compete in the labor market in a cost-effective way. Rather than increasing military pay for all, incentive pays increase military pay selectively. Incentive pays are a means of targeting higher pay to where and when it is most needed to ensure an adequate supply of manpower. Because incentive pays are targeted, they are less expensive than an across-the-board increase in military pay. Some incentive pays such as sea pay or aviation career incentive pay are highly stable additions to foundation pay. Other incentive pays such as enlistment and reenlistment bonuses can be turned on and off as needed, and this flexibility means that they offer a fast, well targeted, and temporary increase in pay. Similarly, deployment related pays such as hostile fire pay and the combat zone tax exclusion are viewed as a just recognition of special sacrifices and risk attached to deployment to a hostile area.

Incentive pays are paid to those people on the brink of enlisting or reenlisting who wouldn't have enlisted or reenlisted without getting these pays. But they are also paid to those who would have enlisted or reenlisted even without the bonus. For instance, all service members who reenlist in a specialty covered by a bonus will receive a bonus, though some would have reenlisted without a bonus. The fact that some individuals are paid more than they need to be paid to reenlist is not unique to military incentive pays but is a common feature of labor markets. The market-clearing wage is the wage needed to hire or keep the worker on the margin and is higher than needed for

workers below the margin. But all workers receive the market wage because if they didn't they could seek work in a different market, and they have no incentive to reveal that they would accept less than the market-clearing wage.

The fact that incentive pays (or market wages in general) pay some workers more than they would be willing to accept should not be seen as a flaw. Incentive pays are a way of making military pay competitive in a competitive labor market. Without them, losses at the margin would escalate and manning in specialized assignments would suffer. For example, overall manning in a military specialty such as logistics may be in good balance, but the subset of logisticians qualified to perform as recruiters or parachutists may be in very short supply. An incentive pay motivates logisticians to volunteer for specialized training and duty in these particularly challenging or risky duties, payable so long as they hold the specialized assignments.

Enlistment and reenlistment bonuses have been extensively used in recent years. This may seem puzzling in view of the major adjustments to pay in NDAA 2000 and subsequent increases in basic pay and the basic allowance for housing. But despite these pay actions, our analyses suggest that the military operations in Iraq and Afghanistan had a downward effect on Army recruiting, and the extensive deployments supporting these operations had a downward effect on Army and Marine reenlistment. However, we also find that the expanded use and higher levels of enlistment bonuses helped to counteract the downward trend on Army enlistment and the expanded use and higher levels of reenlistment bonuses greatly helped to counteract the downward pressure on reenlistment of more extensive deployments.

These analyses are described in a forthcoming RAND report, *Cash Incentives and Military Enlistment, Attrition, and Reenlistment*, MG-950. In the case of enlistment bonuses, we estimate that a 10 percent increase in enlistment bonuses expands the high-quality market for Army recruiting by 1.7 percent. While this may seem small, it is useful to put this result in perspective. Between the end of FY 2004 and the end of FY 2008, the average enlistment bonus in the Army increased from about $3,000 to about $12,000. Using our estimated model, we predict that in the absence of this increase in enlistment bonuses, high quality contracts in the Army would have been about 20 percent lower, implying that the Army would have enlisted 1,670 fewer high-quality contracts per quarter. At the same time, we estimate that the Iraq war took a negative toll on Army recruiting, after controlling for other factors that were changing at the same time, and that the increase in enlistment bonuses expanded the market and helped offset this negative effect of the Iraq war on recruiting. We also estimate that enlistment bonuses achieved this market expansion at less cost than had basic pay been increased instead. That is, if basic pay had been

increased to generate the additional 1,670 recruits per quarter, the cost to the taxpayer would have been greater.

How effective are reenlistment bonuses? It is useful to think of the generosity of a bonus offer in terms of the bonus multiple, or step. The amount of the bonus for a four-year reenlistment is equal to the product of monthly basic pay, years of reenlistment, and bonus step. Monthly basic pay depends on rank and years of service, the length of reenlistment is chosen by the service member, and the service sets the bonus step. The FY 2010 basic pay for a corporal (E-4) with three to four years of service is $2,094, so the bonus for a four-year hitch at step 1 is $8,376, for example. In the study mentioned above, we estimate that a one-step increase in the bonus increased first-term reenlistment by 2.5 percentage points in the Army, or from about 40 percent to 42.5 percent. The estimates for the other services are 2.5 percentage points for the Navy, 3.6 percentage points for the Marine Corps, and 1.6 percentage points for the Air Force. Estimates at second-term reenlistment tend to be somewhat smaller: Army, 2.5 percentage points; Navy, 1 percentage point; Marine Corps, estimate not statistically different from zero; and Air Force, 1.5 percentage points. These estimates are in line with previous studies.

To put these reenlistment bonus estimates in perspective, it is useful to compare them to the effects of deployment on reenlistment. We find that soldiers and marines with 12 or more months of deployment in the three years before their reenlistment point had lower reenlistment rates, as compared to those with no deployment, and by 2006 two-thirds of the soldiers and half of the marines at first-term reenlistment had 12 or more months of deployment. The large portion of personnel with 12 or more months of deployment coupled with the negative effect on reenlistment for those with 12-or-more months threatened to reduce reenlistment and imperil unit manning. However, reenlistment bonus usage and amounts increased a great deal from 2004 to 2005 and remained at higher levels in the following years. For instance, in 2004 approximately 15 percent of first-term soldiers who reenlisted received a bonus, and its average step was about 1.3. In 2005 about 70 percent of first-termers who reenlisted received bonuses, and the average step was about 1.9, or roughly a 50 percent increase in bonus generosity. The percentage receiving a bonus and the average step increased a bit further in 2006 and 2007. We estimate that the expanded use and increased generosity of reenlistment bonuses was sufficient to offset the downward pressure coming from deployments, resulting in a steady overall reenlistment rate. (This is reported in *How Have Deployments During the War on Terrorism Affected Reenlistment?* MG-873.)

Both enlistment and reenlistment bonuses today are paid half up front at the time the new term begins and half in annual installments over the term. This approach is a sensible compromise.

Research shows that service members prefer a bonus to be paid in full immediately rather than paid in installments, but by paying half of the bonus in installments the services create an ongoing incentive for the member to stay in service for the entire term. In the *Cash Incentives* report, we find evidence that bonuses induce members to stay in service, though the effect is rather modest. Specifically, we find that a 10 percent expansion in Army enlistment bonuses reduces first-term attrition from about 32 percent on average to about 31 percent.

Bonuses can be used to fine-tune personnel management. For instance, the Army offers higher bonuses for certain locations, and is using bonuses to match the entry date of new recruits with the availability of training seats. Another important use of bonuses is to channel recruits into hard-to-fill specialties. The effectiveness of bonuses for skill channeling was demonstrated in an enlistment bonus experiment (The Enlistment Bonus Experiment, R-3353). That study found that holding the total number of enlistments constant, an increase in bonuses targeted to hard-to-fill occupations increased enlistments in those occupations by 43 percent.

The role of bonuses is not limited to the active components. In the reserve components, two types of recruitment bonuses are used, enlistment bonuses and affiliation bonuses. The allowable size of these bonuses increased markedly in 2006, and in work underway at RAND we are finding that these bonuses have been effective in increasing prior service enlistment into the reserve components. The study has not yet addressed non-prior service enlistment so we do not have estimates of bonus effects for this population.

There is an area where the use of bonuses might be improved. This has to do with bonus ceilings, i.e., the upper limit on the size of a bonus. Generally speaking, a more generous bonus creates an incentive to sign up for a longer term, but a bonus ceiling can thwart this incentive. Some service members may be at or near the bonus ceiling because they are in a high pay grade or a specialty offering a high bonus step. In these cases, an increase in the bonus step means that the member can sign up for a shorter term without decreasing the amount of bonus he receives. Our empirical evidence confirms this behavior. A higher bonus ceiling would remove this undesired effect. More generally, there should be some flexibility to allow a higher ceiling in cases where higher bonuses are needed to sustain retention.

To summarize, research consistently finds that people are responsive to enlistment and reenlistment bonuses, and this finding is confirmed in our studies and those of others. Bonuses expand the recruitment market, are effective in inducing enlistees to select hard-to-fill occupations, and induce service members to reenlist rather than leave for civilian opportunities. Furthermore, our analysis finds that bonuses have expanded the market and increased reenlistments in a cost-

effective manner, especially when compared to military pay. In other words, if Congress had instead opted to raise pay more to achieve the same increase in enlistments and reenlistments, the cost to the taxpayer would have been more. Finally, carefully targeted bonuses have been helpful in sustaining reenlistment in recent years when the burdens of deployment have threatened to decrease it.